

Claims:

1. A wireless network environment , comprising:

a plurality of classes of wireless clients, each comprising unique identifiers and attributes independent of other classes of wireless clients

5 within the wireless network environment; and

a wireless client independent portal server coupled to communicate with said plurality of classes of wireless clients to provide a series of services available on said portal server, said plurality of classes of wireless clients issuing service requests to the portal server via established communication

10 links and protocols within the network; and

wherein one of said services comprise a hierarchical client detection service using extensible predefined parameters.

2. The wireless network environment of Claim 1, wherein said hierarchical
15 client detection service comprises client detection logic for hierarchically detecting client specific attributes from service requests issued to said portal server from a wireless client device within any of the plurality of classes of wireless clients.

20 3. The wireless network environment of Claim 2, wherein said portal server further includes a wireless client data storage unit coupled to said client detection logic to store client data objects which uniquely define each client within said plurality of classes of wireless clients.

25 4. The wireless network environment of Claim 2, wherein said client detection logic further detects client specific attributes of a wireless client by hierarchically searching said client data storage unit to extract profile

information from the portal server by examining a hypertext transport protocol header coming from the client's request.

5. The wireless network environment of Claim 3, wherein said client
5 detection logic comprises client data distinguishing logic for distinguishing between predefined client information pertaining to a client within any of said plurality of classes of wireless clients stored in said wireless client data storage unit and client data information which is dynamically extracted by said client detection logic from incoming client requests to the portal server.

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6. The wireless network environment of Claim 4, wherein said client
detection logic is extensible to dynamically gather client specific information as said client issues service requests to said portal server and when said client specific information is not available in said wireless client data storage unit.

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7. The wireless network environment of Claim 6, wherein said client
detection logic extracts client specific attributes from a user-agent Hyper Text Transport Protocol header from a client request to the portal server.

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8. The wireless network environment of Claim 7, wherein said client
detection logic extracts client specific attributes from headers other than said user-agent Hyper Text Transport Protocol header.

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9. The wireless network environment of Claim 6, wherein said wireless client
data storage unit comprises an internal client data storage unit for storing new client instance transient data that is absent from the portal server for wireless client devices connecting to said portal server.

10. The wireless network environment of Claim 9, wherein said wireless client data storage unit further comprises an external client data storage unit for storing persistent data comprising extensible predefined data.

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11. A wireless portal server for handling a plurality of wireless service requests from a plurality of wireless clients each having unique identifying attributes, said wireless portal server comprising:

a wireless extensible hierarchical client detector;

10 a wireless client data storage coupled to said wireless extensible hierarchical client detector; and

a wireless client data service coupled to said wireless extensible hierarchical client detector.

15 12. The wireless portal server of Claim 11, wherein said wireless extensible hierarchical client detector extracts client specific data to identify wireless clients that request services from said wireless portal server by hierarchically searching said wireless client data storage to extract data that exactly matches said client specific data present in a service request header of a wireless client.

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13. The wireless portal server of Claim 12, wherein said wireless extensible hierarchical client detector extracts said client specific data to identify wireless clients that request service from said wireless portal server by hierarchically searching said wireless client data storage to extract data that partially matches
25 said client specific data present in a service request header of a wireless client.

14. The wireless portal server of Claim 13, wherein said wireless extensible hierarchical client detector further extracts said client specific data to identify wireless clients that request service from said wireless portal server by hierarchically searching said wireless client data storage to extract data that matches predefined classes of wireless clients similar to said client specific data in a service request header of a wireless client.

15. The wireless portal server of Claim 11, wherein the wireless extensible hierarchical client detector comprises logic to differentiate predefined data pertaining to a first wireless client of a particular class of wireless clients stored in the wireless portal server from client specific data dynamically extracted as a second wireless client connects to said wireless portal server.

16. The wireless portal server of Claim 15, wherein the wireless client data storage comprises an external client data storage that stores persistent client predefined data objects for a known class of wireless clients which connect to the wireless portal server.

17. The wireless portal server of Claim 16, wherein the wireless client data storage further comprises an internal client data storage that stores transient data objects dynamically provided by a wireless client connecting to said wireless portal server without any predefined data objects.

18. The wireless portal server of Claim 17, wherein the wireless extensible hierarchical client detector comprises client request deciphering logic for parsing client service request headers to determine whether data pertaining to

a specific client requesting service from the wireless portal server is already available in the wireless server.

19. The wireless portal server of Claim 18, wherein the hierarchical client
5 detector further comprises client data extensible logic for dynamically
extracting "client-type" information which is absent from the wireless portal
server from the client request headers and storing said extracted data in said
internal client data storage unit.

10 20. The wireless portal server of Claim 19, wherein said "client-type"
information defines a logical class of clients uniquely identified by an
extensible list of properties common to the class.

21. The wireless portal server of Claim 20, wherein said wireless extensible
15 hierarchical client detector further comprises client data search logic for
hierarchically searching to match said predefined data objects in the wireless
client storage unit to said client request headers.

22. A method of detecting wireless clients within a wireless network
20 connecting to a wireless portal server, comprising:

receiving service requests from said wireless clients connecting to the
wireless portal server; and

parsing header information in said service requests to automatically
extract client specific information and hierarchically comparing said client
25 specific information to extensible predefined parameters stored in said
wireless portal server in order to detect said wireless clients connecting to said
wireless portal server.

23. The method of Claim 22, further comprising hierarchically searching predefined client profile information to extract an exact match to said client specific information.

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24. The method of Claim 23, further comprising hierarchically searching said predefined client profile information to extract a partial match to said client specific information in said header information.

10 25. The method of Claim 24, further comprising hierarchically searching said predefined client profile information to extract information common to a class of wireless devices supported by said wireless portal server that matches said client specific information in said header information.

15 26. The method of Claim 25, wherein said header information comprises user-agent headers that are extracted from said service requests to detect wireless clients connecting to said wireless portal server.

20 27. The method of Claim 26, wherein said header information further comprises composite capabilities preferences profile information.

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